



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

RBW6305G17931-3G

Job Sheet 172377



out 16

Part No: RBW6305G17931-3G

Job Qty: 3 ea

Part Name: Tool Pump 1-2-3 Drive Quill Lip Seal Installer



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 2/16/18

Job Tracking No:

Due Date: 4/16/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG RBW6305G17931-3G Rev B IPP Rev A 18.02.15 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Purchasing	3 pcs		4/16/18	0.00	0.00	Purchasing		At 1804/16
110	Packaging	3 pcs		4/16/18	0.00	0.00	Packaging2		At 1804/16
120	QC	3 pcs		4/16/18	0.00	0.00	QC6		38
130	Packaging	3 pcs		4/16/18	0.00	0.00	Packaging3		18-04-16
140	QC21-FG	3 Ea		4/16/18	0.00	0.00	QC21		GA092

Part Op 100 - Issue PO to ARROW TECH MACHINE WORKS P/O: 639004 MANUFACTURE RBW6305G17931-3G AS PER
Descriptions: DWG -Certificate of conformity is required

FEB 22 2018

DAS

APR 17 2018

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
RBW6305G17931-3GP	Tool Pump 1-2-3 Drive Quill Lip Seal Installer	3 (1 ea)	100-Purchasing	5061199

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Purchasing	RBW6305G17931-3GP	3	0	0

Part Specifications

Specifications could not be found.

Plex 2/16/18 8:01 AM Dart.lajeunesse.marie

DQA? _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

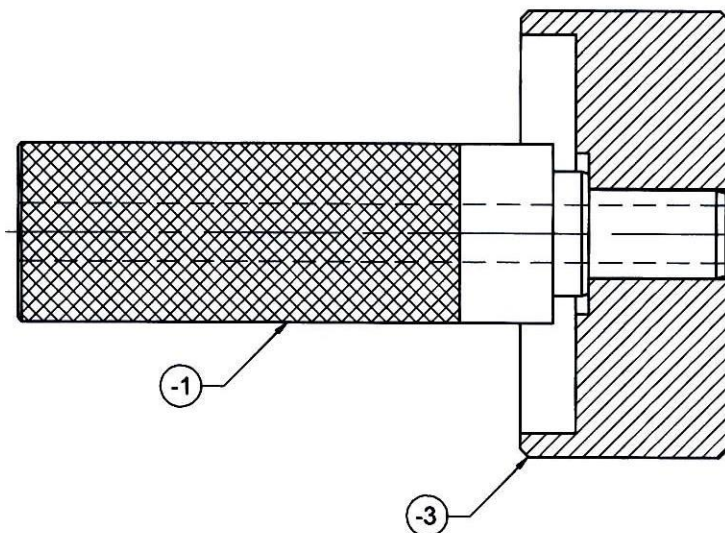
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																											
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval																																																									
Change No: _____ Operation: _____ Revision: _____ Serial No/Batch: S061200 PART NO: RBW6305G17931-3G Packaging Mfg Date: 04/16/18 Job No: 172377				Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____																																																									
Root Cause <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:33%;">Environment ☐</td> <td style="width:33%;">No Re-verification ☐</td> <td style="width:33%;"></td> </tr> <tr> <td>Design ☐</td> <td>Operator ☐</td> <td></td> </tr> <tr> <td>Doc/Data ☐</td> <td>Offset/Setup ☐</td> <td></td> </tr> <tr> <td>Equip/Tooling ☐</td> <td>Supplier ☐</td> <td></td> </tr> <tr> <td>Handling/Pre ☐</td> <td>Training ☐</td> <td></td> </tr> <tr> <td>Material ☐</td> <td>Use for Testing ☐</td> <td>Cuffs ☐</td> </tr> <tr> <td>Internal Transport ☐</td> <td>Poor Information ☐</td> <td>Crushing ☐</td> </tr> <tr> <td>Tribal Knowledge ☐</td> <td>Rushing ☐</td> <td>Heat Treat ☐</td> </tr> <tr> <td>LOA ☐</td> <td>Product Improvement ☐</td> <td>Wave/Twist in Tube ☐</td> </tr> <tr> <td>Substation ☐</td> <td>Process Improvement ☐</td> <td>Marks/Chatter ☐</td> </tr> <tr> <td>Past Expiry Date ☐</td> <td>Manufacturing Process ☐</td> <td></td> </tr> <tr> <td>Misidentified ☐</td> <td>Past Due ☐</td> <td>OTHER : _____</td> </tr> </table>				Environment ☐	No Re-verification ☐		Design ☐	Operator ☐		Doc/Data ☐	Offset/Setup ☐		Equip/Tooling ☐	Supplier ☐		Handling/Pre ☐	Training ☐		Material ☐	Use for Testing ☐	Cuffs ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Past Expiry Date ☐	Manufacturing Process ☐		Misidentified ☐	Past Due ☐	OTHER : _____	<table style="width:100%; border-collapse: collapse;"> <tr><td>☐</td><td>Positioned Wrong</td></tr> <tr><td>☐</td><td>Outside Dimensions</td></tr> <tr><td>☐</td><td>Over/Under tolerance</td></tr> <tr><td>☐</td><td>Part Incorrect</td></tr> <tr><td>☐</td><td>Part Lost/Missing</td></tr> <tr><td>☐</td><td>Part Moved</td></tr> <tr><td>☐</td><td>Drawing</td></tr> <tr><td>☐</td><td>Finish</td></tr> <tr><td>☐</td><td>Misread</td></tr> <tr><td>☐</td><td>Turning Sequence</td></tr> </table>		☐	Positioned Wrong	☐	Outside Dimensions	☐	Over/Under tolerance	☐	Part Incorrect	☐	Part Lost/Missing	☐	Part Moved	☐	Drawing	☐	Finish	☐	Misread	☐	Turning Sequence
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This drawing, specifications, and concepts contained here in are the sole property of Red Barn Machine, and may not be reproduced or used in any fashion without the prior written permission of Red Barn Machine.

REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED
A	CH'D -3 ENGRAVE NOTES PER R.W.	5/6/11	RJC	RW
B	CH'D TOOL NAME WAS DRIVE QUILL LIP SEAL INSTALLER IS TOOL, PUMP 1-2-3 DRIVE QUILL LIP SEAL INSTALLER.	11/1/13	RJC	RW



NOTE:

1. ALSO SOLD WITH KIT RBW6305G01531-3G,
BOX ONE RBW6305G19631-3G.

RED BARN MACHINE	
TITLE TOOL, PUMP 1-2-3 DRIVE QUILL LIP SEAL INSTALLER	
DWG NO. RBW6305G17931-3G	REV B
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	DRAWN BY: CLOUGH
TOLERANCES ON: DECIMALS .XX ± .005 XX ± .01 X ± .1	APPROVED <i>D. Wed</i> HEAT TREAT FINISH SPEC
METRIC REF. .XXmm ± .1mm FRACTIONS ± 1/32 ANGLES ± 5°	USED ON MODEL AW139
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE NTS	DATE 2-3-11 SHEET 1 of 3

ASSY QTY	ASSY #	B/O	PART #	UNIT QTY	DESCRIPTION	MATERIAL	B/O INFORMATION OR SPECIFICATIONS	Pg.
			-1	1	HANDLE	6061 RND. BAR	Ø1-5/8 x 6-1/2	2
			-3	1	RECIEVER	6061 RND. BAR	Ø4 x 2	3
	ASSY #							

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					



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PURCHASE ORDER PO039084

Items											
Line Item	Part	Supplier Part No	Item No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
Line Item Note job# 172405											
23	RBW6305G13731-3GP			Gimball Carbon Seal Remover As Per Dwg RBW6305G13731-3G Rev. 2	Firmed	4/16/18	3 Ea	0 Ea	3 Ea	\$362.28/Ea	\$1,086.84
Line Item Note job# 172401											
24	RBW6305G13231-3GP			Gimball Carbon Seal Installer As Per Dwg RBW6305G13231-3G Rev. B	Firmed	4/16/18	3 Ea	0 Ea	3 Ea	\$984.42/Ea	\$2,953.26
Line Item Note job# 172399											
25	RBW6305G14031-3GP			Gimball Carbon Seal Remover As Per Dwg RBW6305G14031-3G Rev. 2	Firmed	4/16/18	3 Ea	0 Ea	3 Ea	\$639.24/Ea	\$1,917.72
Line Item Note job# 172397											
26	RBW6305G14331-3GP			Upper Module Lip Seal Installer As Per Dwg RBW6305G14331-3G Rev. 1	Firmed	4/16/18	3 Ea	0 Ea	3 Ea	\$758.42/Ea	\$2,275.26
Line Item Note job# 172382											
27	RBW6305G18251-3GP			Guide Pumps/Ecs Drive Quill Seal Housing Installer As Per Dwg RBW6305G18251-3G Rev. A	Firmed	4/16/18	3 Ea	0 Ea	3 Ea	\$132.32/Ea	\$396.96
Line Item Note job# 172381											
28	RBW6305G17631-3GP			Tool Pump 1-2-3 Drive Quill Lip Seal Remover As Per Dwg RBW6305G17631-3G Rev. B	Firmed	4/16/18	3 Ea	0 Ea	3 Ea	\$496.30/Ea	\$1,488.90
Line Item Note job# 172378											
29	RBW6305G17931-3GP			Tool Pump 1-2-3 Drive Quill Lip Seal Installer As Per Dwg RBW6305G17931-3G Rev. B	Firmed	4/9/18	3 Ea	0 Ea	3 Ea	\$392.72/Ea	\$1,178.16
Line Item Note job# 172377											
30	RBW6305G17131-3GP			Drive Quill Seal Housing Removal Tool As Per Dwg RBW6305G17131-3G Rev. 3	Firmed	4/16/18	3 Ea	0 Ea	3 Ea	\$905.64/Ea	\$2,716.92
Line Item Note job# 172376											



ARROW TECH MACHINE WORKS

Certificate of Conformance

Your Purchase Order No:039084

Dated: 4/12/2018

Our Order / Job No:03AWT

Order Qty:3 ASSEMBLIES

Part Name: HANDLE & RECEIVER

Part Number:RBW6305G17931-3G

Lot Size: N/A Ship Date: 4/12.3/18

We certify that these parts shipped to you are of domestic or international manufacture and conform to all requirements of the Purchase Order. These parts have been manufactured and inspected in accordance with all required specifications, instructions and drawings. Any applicable specifications are listed below:

Drawing Number:RBW6305G17931-3G Rev:B

Material Size and Type: -1/6061 ALUM, -3/6061 ALUM

Material Specifications: ALUM-ASTM B221

Heat Treatment: N/A

Plating/Finish: CLEAR ANODIZE SPEC: MIL-A-8625F, TYPE II, CLASS I

Mercury Contamination: The material used to process this order has not come in contact with mercury or mercury bearing instruments.

Date: 4/12/18

Signed: Herbert M. Sabet

PHGE Machine Works LLC dba Arrow Tech Machine Works
29751 E. Enid Rd. Unit C Eugene, Oregon 97402
Main: (541) 780-6938 | Fax: (458) 215-4938
www.atechmachineworks.com